**JOHN KIRBY:** So, If I could just get you both to say your names, and give me a little bit about your background?

**DAN ERICKSON:** My name is Dan Erickson, I'm an emergency-trained physician. I got my health sciences degree from La Sierra University; I went to Western University for medical school. And we trained locally at the county in a 4-year emergency program, and then we've been in the county for about 15 years, working in different hospitals and building our business.

**ARTIN MASSIHI:** My name is Art Massihi. I did undergraduate at University of California, Irvine, and medical school at Loma Linda University School of Medicine. I did an internship in general surgery at University of Southern California, and I did my 3-year residency, after that, at Kern Medical Center, which I completed in 2008. And since 2012, from 2008-2012, we worked in urgent cares and emergency rooms, locally, and we opened up our businesses in 2012, which we've managed and worked in for the past 8 years.

**KIRBY:** You guys recently held a press conference on April 22nd. What led to your deciding to do that?

**ERICKSON:** Well, initially, when you have a *novel*, or a new, virus, you're trying to decide how to respond to it. So, we, obviously took the leadership from our president and from Dr. Fauci; they said we need the community to shelter in place, and we need people to take measures, like social distancing, which we did. We need to embrace PPE, which we did. So, we got a significant number of supplies and we got N95 masks for our staff. We set up a COVID testing center at our larger facility, and we really got in line with everything that was being said. To do the testing while we figure out our approach.

So, because it was a new virus, you know, we said "Let's gather data for a couple of months. Let's do testing." Initially, criteria-based testing, fever, cough, shortness of breath, and then that transitioned into testing all kinds of people for employers, people coming in because they lived with a grandmother who was immune-compromised, and they were concerned.

**MASSIHI:** Initially, about six to eight weeks ago, we decided to do coronavirus testing, because we, Dr. Erickson, had met with multiple CEO's and everybody wanted us to do the testing. So, we were just like, "You know what? We are leaders in this community, and this is kind of something we need to do." So, we set aside 10,000 square feet of our 212 Coffee Road location, more of a community service. And that's why we were able to do so many tests, and we're known in the area for doing the most tests, because of that. I think most folks think that because you're in urgent care, the only people that come in here are sick. "I have a fever and I have a cough. Can I get checked for coronavirus?"

That's the farthest thing from the truth. A big portion of our sample volume were healthy folks that were not concerned, but their employer sent them in for testing. These are folks that are random folks from the community that came here for testing. They had no symptoms, no concerns. I saw many of them, so did Dr. Erickson. I said, "Why are you here?" "Oh, just my boss is forcing me. I need to get tested." "Do you have any symptoms?" "No, I feel fine." So, our sample distribution and demographic is representative, but I think that's why folks think that it's not because it's an urgent care - only sick people come into an urgent care. And that's not true.

**ERICKSON:** So, we really started loosening up our testing, probably three to four weeks ago, where we were. Our testing was much more randomized, at that point. and to date, we've done a little over 6,000 tests, with about 450 positives. This is a PCR test, it's a nasal swab. It's a moment in time that shows if a patient is positive or negative. We just recently started doing antibody testing. Our plan was to do a small press release for our community - there's about 900,000 people in Kern County - and we said, "Let's just do a press release saying, 'At this moment in time, we're showing'" - at that time, it was 4.5%, currently it's 7.3% - "'of a moment in time, out of our 6,100 tests, that are PCR nasal swabs, 7.3% are positive.'" We weren't necessarily extrapolating, although we did sort of say, "If this is an accurate sample, then we've got quite a few more cases in Kern County than we had anticipated.

The hospital released some data today. In the hospital today, there is 14 cases of COVID out of 900,000 people. And there's three people on ventilators, per their public data. So, when you talk about an overwhelming COVID illness, in Kern County, we do not have that.

**KIRBY:** It was quite a shock to see that your video, which was, after all, just raw footage of a press conference, posted by a local ABC affiliate, that it had been taken down last night by YouTube for "violating community standards." Did you receive more detail about what standards you allegedly violated? Or this video allegedly violated?

**ERICKSON:** No. We don't really know exactly why they took it down. I really - our focus, honestly, really, has been about what can we do to get the country back on track, because the social media side of this is not the big issue. The big issue is people suffering. I have patients texting me bout, you know, anxiety medications, "I'm out of work, we don't have any money." The collateral damage of the COVID is causing increasing pain in our Kern County area. So, that's really what we want to speak about, is the collateral damage. Because in Kern County, the collateral damage appears more significant than the damage being caused by the actual disease of COVID, which is a viral illness, causing similar to a flu-type outbreak in Kern County.

**KIRBY:** So, your position is in line with a great number of epidemiologists and doctors worldwide, including three we've interviewed on this channel, John Ioannidis, Knut Wittkowski, and David Katz. You know, the response that you got from the American College of Emergency Physicians and the American Academy of Emergency Medicine - these were very extreme responses. From a layperson's perspective, it would seem to me that the science ought to be open and questioning and, you know, subject to evolution, and yet you guys are being sort of clamped down on pretty hard. Do you have a sense of why you're getting the reaction you're getting from some quarters?

MASSIHI: We haven't. And I think what's important is, I'm actually, interestingly, a part of the American Academy of Emergency Medicine, I'm board-certified through Emergency Medicine. And, the - when I saw what they had written this morning, I was shocked, because my standpoint, you know, as an emergency physician, or our standpoint is, if you disagree with our numbers, okay. Let's analyze the numbers. But to attack us and say we have a financial gain from this - it just seems like there's a lot of anger and hatred which is not really warranted. So, it doesn't make much sense to us. And it's interesting because I spoke to another physician this morning, and he said (I mean he's, I don't want to name him, but he's linked to a world-renowned institution), he said, he's never been this vilified in his life. He says, "I've had debates, and we've disagreed on certain results with different scientists, or what these results mean, but, you know, the amount of the reaction was extremely surprising." A colleague, a physician to a physician, doesn't react that way. If you're, if our data, if you think our data is flawed, let's discuss it, but to have that kind of anger was, I thought, kind of unwarranted.

**KIRBY:** So, you're being accused of bias based on your desire to open up your care centers to other kinds of patients and for your political views. Are there good reasons to believe that you're not falling prey to confirmation bias?

**ERICKSON:** I've spoken with other emergency room doctors and I did an interview on Dr. Lang yesterday, from Wisconsin, and I said, "Dr. Lang, what is your viewpoint?" And my full Zoom interview is posted on our website, if people would like to see it. I said, "What are you seeing at your hospitals?" He said, "Decreasing hours." He said, "What I'm seeing is, patients are not coming in for significant issues, such as chest pain." He said, "For instance, two days ago, a man had chest pain, wanted to come to the ER, but he was concerned about getting COVID. He stayed home. He was having a heart attack and had significant problems afterwards for not coming in soon enough." And he said, "I have many cases like this, of abdominal pain. [Patients] won't come in, and something much worse is happening, and they just were afraid to come in because of COVID." So, this fear (and this is not a one-off testimony; I've talked to other doctors but that's the only one I have on record), who have told me, "The ER where I'm at is, the census is low, patients are not coming in for things they should have. Our hospital is fairly empty." Another physician I talked to is a board-certified orthopedic surgeon out of Texas. And I said, "How's it going?" He said, "Well, I did a case a few weeks ago that they considered non-essential. And I got a letter stating that if I do

any more cases, I could be fined and/or imprisoned for helping people with a limb that was non-functional, because that was considered non-essential."

So, when we see this kind of thing start happening, time and time again, we have to ask ourselves, is the collateral damage of COVID indeed worse than the COVID virus itself? So, when people say there's financial gain, I just gave you two examples of people who don't have businesses, who work in the system, and who are saying this is bad for patients, and it's bad for our surge capacity. For instance, if you've furloughed doctors and nurses (as you guys know, this is public knowledge; many hospitals have), how do you handle a second wave? I called our hospitals today, and they said, "We have plenty of capacity, we're ready for a surge, absolutely. But if you furloughed nurses and doctors and we get a second wave, we're unable to adequately staff." So that's my answer to your question.

**MASSIHI:** So, this all started as a way to, you know, help this community that's been so amazing to us for the past 15 years. We're, you know, combined 30 years [experience]; we trained here. We have lots of friends here, and so everything that we've done, and everything that we continue to do, is for the community. Obviously, if we see more patients, we have to get paid for the patient, but that's not our motive, and I want to get that out there. Although our volumes are lower, we're still doing fine. We're not - we're doing better than almost anybody in the community, which we're very blessed about. So, that, to me, doesn't' make any sense. I honestly don't appreciate you know the American Academy and some of these other emergency organizations stating these things about us, because I think it's a little unwarranted and inappropriate.

**KIRBY:** One of your critics was a guy by the name of Dr. Carl Bergstrom, from the University of Washington, and he says, "It's been a huge surprise for all of us doing infectious disease epidemiology; it's amazing to have to deal with this misinformation that's being spread around for political purposes and the ways that that interferes with adequate public health response." I just want to clarify again, I mean, what do you think he means by "political purposes," and do you have any political purposes?

MASSIHI: No.

**ERICKSON:** No, we don't, and we're not psychiatrists. I don't want to psychoanalyze another person's viewpoint. Our role, and I'm going to keep coming back to this, is to point to the experts, both in the United States and in Sweden and say the epidemiologists are telling us that when they review the data, as they do every year, they're recommending a different course. And Sweden has taken a different course, and it's had a pretty good outcome. Is there something we can learn from that? Because there's always going to be dissenting opinions. And it's not - I don't think it's necessarily prudent to go back and forth; what is prudent is to say, "Moving forward, how do we get the country back on track? How do we keep COVID patients healthful? How do we protect our hospitals and make sure they're ready for surge capacity?" These are the issues we need to be answering and dealing with.

When you have something new like this, you have to decide on your approach. Nobody had an exact plan for this. So, you initially shelter in place, you social distance, you get PPE going, and then you watch how the disease develops. And we're, of course, comparing it to seasonal flu and we're seeing is it a lot different: how is the death rate? It seems to have spread more rapidly; it has a little bit more of a respiratory component to it. And then, at this point, we've - so we released that press conference, and now, we are consulting with epidemiologists, specifically in Sweden, and Dr. Wittkowski, and Dr. Anders, and Dr. Giesecke. We are talking to the epidemiologists, who have spent 35 years of their life to understand this process, and we're saying, "What is the best approach to take?" Sweden has taken a different approach than we have: Sweden has said kids under 16, "You can go to school;" people can come out of their house; the restaurants are doing some social distancing; and when they asked Dr. Anders Tegnell, "Would you do anything different, now that you've watched the disease process for a few weeks?" he said, "Not really."

MASSIHI: Protect elders, yeah.

**ERICKSON:** The only thing he would chose to change was, he wanted to protect the elderly, and they would have done a little more in that sector. Everything else he said, "Our infection rate, our

hospitals, our death rate, are tracking similar to societies like the United States, that have done a lockdown." So, and he did some recent interviews. I was just watching before this interview and he said, "You know, we will know in the next months, which technique was the best." But he said, " For right now, we are very happy with our results, and how we're handling it." They haven't had massive collateral damage to their economy, their death rate per million is at 225; ours is at 175; and Italy and Spain are between 450 and 500. So, he's saying, "We're pretty pleased with the results and our technique so far." And then, when they asked Dr. Giesecke, "How much science is there to social distancing and to shelter in place?" And Dr. Giesecke's answer was "There's virtually no data to show those are effective. However, there is data for handwashing. That is appropriate." So, we see these epidemiologists that have been doing this for decades (you know, he's the chief of epidemiology for the country of Sweden, he's an infectious disease doctor, or was, now retired), so, we're saving, "Let's look at what the people who do this for a living are saving. Our data was a moment in time, it was not made to, you know, necessarily make predictions about the country. It was a moment in time where [this is the data we collected], that's what the press conference was for, and now we're pivoting towards, "Let's listen to the experts in the United States, the epidemiologists, like Dr. Wittkowski, who's done this for 30 years, he's a biostatistician, and he analyzes this kind of data for a living. What does he say?"

And if you watch - I interviewed him yesterday - and he really went over the fact that what we're seeing now is similar to a severe flu, per his words, and I said, "Do you agree with the Swedish model?" And he said, "I absolutely do." So, my question was, how do you get back to work? Because that's what we're all interested in. How do you get back? So, he said, "You've got to open the schools up to kids, up to 16, get the school system moving. See how that effect goes. Then you can slowly open restaurants and different things, monitoring the disease rate and the hospital rate, because shelter in place was to keep our hospitals from getting overwhelmed." I called two CEOs today of different massive hospital chains and they told me "Our census is low, and we are prepared for a second wave, should it occur." So, census is low, and we're prepared for surge, they all told me that. So, I think we've used, and appropriately, the shelter in place, social distancing, that was appropriate. And now that we have some data and we've watched the disease curve sort of flatten out, maybe it's time now to be moving toward more of a Swedish model.

**KIRBY:** I was struck by what you all were saying about quarantine and its unhelpful impacts. Could you just run over those with us? What have you either noted or what are your fears there? **MASSIHI:** Well, I think most folks who are trained in immunology would agree, although these days, you don't know. They may disagree, but I think if you stay home and you are sheltering in place for prolonged periods of time, your normal flora (the bugs that keep us healthy), the concentration of those do decrease, and the example we gave is of a baby. When a baby is born, for the first few months of life, they have, they're immunodeficient. And the reason is because they haven't had enough contact with the outside world, and so, they're more likely to get opportunistic infections. So, if we see a baby in the emergency room who has a fever, then we do this huge workup on them, because we want to make sure they don't have meningitis, bacteremia, pneumonia, all these different infections, you know, urinary tract infection that's causing this massive infection in them. Whereas, if I evaluate you for a fever and you're young and healthy, then, for the most part, you know, other than my history and physical exam, I may do an x-ray if you're coughing or something like that, but we wouldn't do that extensive workup, because you have the appropriate flora, whereas a baby doesn't.

So, when you're staying at home, sheltering at home for prolonged periods of time, you're not going out, you're not intermingling with society, your flora go down and that predisposes you to infection. When you're cleaning your hands, you know, you're wiping them with sanitizer 15 times a day, you're killing off your good bugs, and that's kind of some of the negative effects of social isolation. And we're not saying social isolation was not warranted initially. It was. And we've done that for a couple of months. Where do we go from here is the question? Do we take Sweden's model and open up like Dr. Erickson said, open up schools and look at the number of cases? How many cases of COVID do we have? You know, we try one thing, see if it works, we try something else, and you

gradually open up the economy. I realized we couldn't do that initially because COVID is a new virus, but, COVID-19, but now we have some data from reputable sources, like up north. we have data that this virus is kind of everywhere and the fatality is not as high as we think.

**KIRBY:** Have either of you examined any COVID patients yourself?

**MASSIHI:** Oh yeah, absolutely. I've had many patients who have COVID and have pneumonia. **KIRBY:** And what is it like? I mean, first of all, I want to know, is there something in particular about *this* disease? We've been hearing reports - you know, I'm here in New York - we've been hearing reports from doctors and nurses that this is unlike other things that they've seen, in the way it presents. It may be that the death rate is, in fact, around the equivalent to a severe seasonal flu, and I think the epidemiology from, even from the government side, may start to bear that out, but the - though they will say it is social distancing that accomplished this - but what have you noted about the way in which this disease presents? And have you found treatment regimes that work? And others that are, perhaps, harmful?

MASSIHI: Well, we don't work in an in-patient setting. We work – we don't work in the hospital, so I don't have the level of experience that a physician that's working in the emergency room in New York will have, because we haven't had that many cases. But the patients that I have seen here that were older, that had a fever, that on exam had pneumonia, they didn't look that bad; but maybe we caught it early. They didn't look that bad, you know; we evaluated the patient, did a chest x-ray, did a history and physical exam, first and foremost, and did a chest x-ray, and they had pneumonia. And we started them on appropriate antibiotics for a 74-year-old gentleman, and did a COVID test, and the COVID test came back a couple of days later, and I didn't prescribe him anything at the time, and I had him follow up with his primary care physician. He presented like a normal person would, with pneumonia. Usually the triad of pneumonia is fever, cough, and, you know, fever, cough, and chest pain. And, I believe he had a fever and cough. So, some of the other folks that were positive didn't have any symptoms at all. They were sent here from - their boss sent them in here, because they were, you know, they were operating a business and they wanted to make sure that everybody is, you know, is COVID-negative, and a lot of folks that we've tested that were positive had absolutely no symptoms at all.

**KIRBY:** Did you guys do blood-oxygen level tests or anything like that? Would you have been involved in doing that level of testing?

**ERICKSON:** Well, we check the pulse oximetry whenever they arrive, and most of our people, you know, have a pulse oximetry above 95%. Occasionally, we would have someone a little bit lower, and if their oxygen level is low, they go to the ER and they are managed there. So, patients that are critical, like what you are asking about, is not really what we do here. In the urgent care out-patient center, we get most people that have a very mild cough, or they have a very mild fever, and they otherwise feel basically normal. So, most of the patients we see had a very, very mild form of disease. And if you, from what the epidemiologists tell me, that is the vast majority of these millions of cases we see globally have very mild to no symptoms. In fact, per the data described by the doctors, the epidemiologists in Sweden. So, we're not seeing the devastating cases. We currently have 847 resident cases in Kern County, out of 900,000. We've had five Kern County resident deaths, and nine non-resident cases. So again, this is out of almost a million people.

**KIRBY:** You spoke about comorbidities. An objection could be raised that so many Americans have comorbidities (like, you know, 40% obesity or, you know, the diabetes rate, or what have you). So, how are we to make a transition back into the world if, in fact, so great a percentage of Americans are in fat, do in fact, have comorbidities?

**ERICKSON:** Well, just because you have comorbidities, [it] doesn't mean you're going to have significant disease. Like, for instance, if you have a chronic obstructive pulmonary disease, which restricts your lung volume, you're going to be more susceptible to a COVID infection that's a little worse, because it is a respiratory illness. But a lot of people with diabetes and heart disease had very mild illness. So, comorbidities is not essentially a death sentence for you. It means that if you get COVID, you might have a little worse time with it, but again, the vast majority of people from

Doctor Giesecke and Dr. Tegnell, from Sweden, have said the vast majority of people we're seeing have very mild to no symptoms.

John, if you don't mind, one thing I'd like to talk about is herd immunity and vaccinations. Herd immunity is critical because herd immunity is how these viruses burn themselves out. And in Sweden, per doctor Giesecke, they say that every year the flu comes in; the flu spreads person to person [by] respiratory droplet; it spikes, and it comes back down. In our county, it's typically from December through March, is our typical cycle for flu. It comes in and it burns itself out by herd immunity, once it hits about 70-80%. Now, if we have a vaccine, which we do for flu, it pushes us to herd immunity quicker. The vaccine is not a perfect science, because not everyone will take the vaccine, and then the vaccine will work, per the CDC's website, on about 30-40% of people, depending on how well it's matched to the strain that year. So, the vaccine is not necessarily the end all be all for viral-type illnesses. Some illnesses it completely wipes them out. Some illnesses like a flu virus, it helps push us toward herd immunity.

[00:27:20.21] Herd immunity is how every country will get rid of COVID, and it's the reason why the Swedish are allowing people to mingle together, because the logic is, they will get to herd immunity quicker than isolating people, which flattens the curve, which prolongs the disease process, and exposes us to a possible secondary spike. Although we are ready for that, as I shared earlier, the hospitals have a low census and they have surge capacity ready for if we have a lot more patients with COVID.

**KIRBY:** So, you don't think we need to have a vaccine in order to get out of lockdown? **ERICKSON:** No. The vaccine, I think is probably more than a year away, per, you know, some of what I've heard from the administration. I think it's going to take a while to get it. But, whether we have a vaccine, or we don't, per, again, per the epidemiologists, you're going to - I'm going to keep saying that because that's what I'm taking my data from - they have said we will reach herd immunity with or without a vaccine. The vaccine helps us to get on the back side of the curve faster and reach herd immunity faster. So, a vaccine would be great, but we didn't have a vaccine for SARS, we don't have a vaccine for the common cold, a lot of viruses we don't have vaccines for, and yet they move through our people every year, and they burn themselves out through herd immunity.

**MASSIHI:** I think one thing to add is, you have to protect the old, you have to protect the frail population. You have to protect those that have severe immunodeficiencies. And those that are likely to not do well. And you have to do this in a step-wise fashion. And you have to make sure folks aren't able to visit nursing homes, which is, I think, one of Sweden's mistakes that Dr. Giesecke had mentioned, that one of the reasons Sweden does have as many deaths, they would have had far less deaths, is because of the fact that their nursing homes are much larger than their counterpart, Norway, and they allowed visitors initially.

**KIRBY:** Now, there's a lot of conflicting opinion about Sweden. There was a *Times* story today, *New York Times* story, that lauded it as a success; but there was a comment that's being sent around that says that the death rate in Sweden, they say, is 233 deaths per million, a rate six times that of Finland, and three times that of Denmark. So, granted, they are - I know I've heard them say they did not do a good a job sheltering the old as they would have liked, but are those figures enough to call Sweden a failure? Or - is that? Or do those figures make sense from what you've seen? **ERICKSON:** No one can answer that. We're not through the disease cycle yet. And so, we're all going to look back on data in a few months and we're going to decide which strategy was most effective. This exact question was asked by Dr. Anders Tegnell, who was the chief epidemiologist in Sweden. They asked him that a couple of days ago. And his answer was, "We'll see." He said, "We're all going through his together. This is a novel, this is a new virus. It's behaving in some ways like flu and in some ways not like flu. It has some different respiratory components, it has a little more of an aggressive spread rate." So really, to say anybody's method is the best right now is premature. We have to allow the full disease cycle to go, and then we will look back on everyone's data; for instance, which country had the disease first and did it come to the metropolitan areas? Did it start in the rural areas? That all makes a difference to how fast the disease moves, how much

death rate you have, you know, what's the population like in Sweden versus Finland and Norway? Do they have, you know, let's, you have to look at the culture and what is there and the type of people and the lifestyle. There's all kinds of factors that play in.

So, I think it's premature, at this point, to say one is better than the other. What we do know is that the collateral damage of shutdown affects nearly every single American. And that's why we're going to keep coming back to the fact that we have to do something that reduces the collateral damage that is affecting everyone.

**KIRBY:** Would it have been more helpful for you as physicians on the ground if there had been a national kind of testing, a randomized testing campaign, most likely an antibody testing campaign, begun a lot sooner, so we'd have a real sense of what the case fatality rate was?

**ERICKSON:** Yeah. I mean, the more data we have like that would absolutely allow us to extrapolate the difficulty is in the logistics. Because, again, I'm going to come back to this point: *this is a new virus. We're not used to dancing with this virus.* The flu, we're used to, and the flu testing is ubiquitous, and the flu test is everywhere, and not everybody is reporting all their flu tests because we do millions of flu tests, and I think.... But again, the first year flu was seen, we didn't have the tests for it. So, when a new virus comes in, you have to ramp up your testing, the labs have to develop the serologic tests, the PCR tests, then they have to study those tests, verify them, and then bring them out to society. So, it's this long process of getting FDA approval. It takes, you know, weeks to months at best case, and then you have to run it on the community and verify your results. So, I think the labs and the scientists are doing an absolutely great job getting this test out there, but it takes time, and then you have to think about the logistics.

[00:33:29.18] If you tell me, "Okay, Dr. Erickson, we want you to test a million people," that's a tall order. It's a tall order for the entire medical community. We don't test the whole community for anything. So, I think it's a little bit unrealistic to say, "We're going to test everyone." I think you test segments of the population randomly and you put them in studies and then you kind of extrapolate the data out to make a decision, your best decision, on - like, for instance, this year, you know, we're going to make our best estimate [of] how many flu cases we had. Is that an exact number? No, it's an estimate, because we didn't test all 328 million people in the United States.

**KIRBY:** Gotcha. Now, to the health effects of the lockdown, or just some of the contradictions in it. You mentioned, and, again, from a health perspective, does it make sense to allow, say, the Walmart or the Costco to be open and not the local pizza place? Is there any science that you're aware of that backs that up?

**ERICKSON:** Well, I'd like to take you through a typical day. We both went to a bike store last week, and we were able to sit with a bike salesman and talk about bikes for, what, an hour? **MASSIHI:** Hour.

**ERICKSON:** We sat there for an hour. No masks. And we were able to sit there for an hour, and then we went over to a restaurant across the street to have lunch, and we couldn't sit down because of social distancing. And then we said, "Oh, we need to go get some supplies at Costco." There's hundreds of people in Costco, and we can stand in an aisle and talk, but I can't go to the little restaurant across the street. And then I stopped by Del Taco on the way home, and there was multiple workers in the back and they're making your food, not necessarily wearing masks, and I'm going, "How does this make sense, where I can go to someplace like Costco, and mingle with people, but I can't-?" You can't go to church, you can't go to restaurants; this sort of picking and choosing, to me - and I ran this by doctor Wittkowski, this morning when I interviewed him - and I said, "Does this make sense to you, as an epidemiologist?" And he said, "Absolutely not." He said, "The virus will move through society as it does whether you lock down or not." People are making deliveries, people are going to Costco, Home Depot, Walmart. They're shopping. They're going to beaches. The virus is going to move through society whether you lock it down or not."

**KIRBY:** What do you think, and Dr. Massihi, if you want to say anything, please jump in, but what do you think will happen if we continue the lockdown? I mean, we're talking about here in New York, they're going to release us sometime, partially in mid-May, maybe. Other places, San Francisco, I think has just talked about going through all of May, and early June being released. So,

from a health perspective, what sort of effects are we going to see, if we keep people penned in for that long?

**MASSIHI:** Well, I think you're going to have a spike in cases. Once we open up, you're definitely going to have a spike. That's unpreventable. But I think you have to look at the risks versus the benefits of that spike. Is that spike worth, are the dangers of that spike worth keeping folks home for longer periods of time? And, I think you have to open up in a systematic fashion.

**KIRBY:** Have we been avoiding the inevitable? Like, in other words, is this, is what Wittkowski and what you guys are saying and seeing, is that this thing is going to have to go through anyway, and we've just sheltered the wrong people in the wrong ways and we-

**MASSIHI:** Yeah. I mean, referencing Dr. Giesecke out of Sweden, and he even said it best. He says, "In order for a virus to move through a community, you have to let it move through a community. You have to protect the old and the frail, you have to protect the immunodeficient, and you have to let it move through the community to develop herd community - excuse me. Herd immunity." The longer we shelter in place, the longer social isolation occurs, the longer it's going to take to reach that 70-80% mark of herd immunity. And so, I think it's inevitable that folks are going to get sick and unfortunately, some folks are not going to do well with coronavirus. But those same folks are not going to do well with influenza. So, unfortunately, some folks (and it's not something physicians like to talk about), but some folks are not going to do well with *any* virus, because they've had four heart attacks, they have, you know, heart failure, or they have immunodeficiency, or they have, you know, really bad diabetes, or chronic obstructive pulmonary disease. They're not going to do well if they get pneumonia. They're not going to do well anyways. So, I think you have to protect those folks, and open up in a stepwise fashion, but I think it's inevitable. I think it's going to happen, whether you're in lockdown or not.

**KIRBY:** Just, briefly, I mean, you guys spoke so eloquently about this during your press conference, but just imagining a new audience here, could you just briefly go through what some of the health impacts, leaving the virus out of it for a moment, what are some of the health impacts of remaining sheltered in this way, quarantined in this way?

**ERICKSON:** Well, I think it's, you know, just from patients coming in here, we're seeing a lot of loneliness, depression. I don't have statistics. I'm just merely repeating what patients are telling us coming in here. I have business owners today that have told me, "If we don't change in the next two weeks, I'm likely going to go out of business and I have two small businesses that have been feeding my family for years." Other owners of salons, cosmetic industries, that have [been] texting me, about an hour ago, said, "I cannot keep my business going like this. I've had to let my employees go." They're having some depression, some anxiety at home. So, I think we're kind of in this together, as Americans. We're lonely isolating from our friends, we're away from our church support groups. We're not seeing our elderly parents. So, it's causing a lot of things in society, a lot of, I'm calling it *collateral damage* that, to me, is becoming the largest burden for us to carry. The virus is a heavy load and I don't want to underestimate what places like New York are going through. They've had a lot of death, you know, they've had a lot of sickness, they've had a lot of fear. But I also want to look at the country as a whole and say, "Let's be responsible, and not let the collateral damage spin out of control to where it's a much bigger problem than the virus itself."

**KIRBY:** Do you have anything to add to that, Doctor?

**MASSIHI:** No, I think that's right on, and on top of everything is, you know, folks are home. They're upset. They're drinking because they don't have a job. Substance abuse is happening. Domestic violence is happening. Child abuse is occurring, all because of secondary effects. And I feel bad for the average American. They're at home, they live paycheck to paycheck, they can't survive. What are they going to do if they are in lockdown for another two months? They don't have a job, they're not getting paid. How are they supposed to feed their children? I mean, we're not interested in that.

**ERICKSON:** Well, and they say, "Oh, don't worry. \$1200 is coming," but \$1200, that doesn't take you very far in this economy. If you have, you know, two or three kids, and you've got a house payment, and a couple of cars, \$1200 is not going to make up for the two months of income you

lost. So, I think we just have to be real mindful of the fact that, let's do the greatest good for the greatest number of people at this time, which is moving the economy towards an open position. Let's use, let's look at the data coming from Sweden and other places, and let's see if we can learn something from them. And we want to part of the solution. Our ultimate goal is, how is our knowledge and our medical practice and our opinions, how do we get them to be helpful and to be something that we all can work together on to get the community open and get us all back to work? **KIRBY:** As physicians, how do you feel when you see someone who literally has no credentials as a doctor or an epidemiologist - I'm talking about someone like Bill Gates, now - being asked how to get out of this crisis, you know, what his thoughts and opinions are on all this. I mean, you guys have been criticized for, you know, not having the, you know, just the right credential to talk about this, though it seems to me as physicians doing the kind of work you're doing, the testing, you do. But does it seem strange to you that someone like Mr. Gates should be the oracle of this? **ERICKSON:** No. It's what makes America a great place to live. We can have dissenting opinions, we can get opinions from people with no background, we can go back and forth, and we're not, you know, shooting at each other. This is what makes the country great. I welcome dissenting opinions. If in this country, we aren't allowed to make dissenting opinions, then we have a problem. A lot of

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**MASSIHI:** Well, that's what a liberal education is. A liberal education is the same thing. Being able to share ideas and respecting each other's ideas and learning from each other, respectfully.

**KIRBY:** Great answer, guys. I mean, of course, the problem is, is that Bill Gates has an enormous platform and you guys were taken off of yours, right? Anyway-

**ERICKSON:** Yeah. Bill Gates has provided an incredible service. I mean, what a company Microsoft has been. You know, there's no question about his credentials. I think people that have accomplished great things, I welcome their ideas, I don't... You know, when I think about Elon Musk, and some of these brilliant minds, if they want to chime in on the discussion, please. Let's get around a table. Let's get this dialed in. These people are brilliant. I am all for solutions. The right solution, no matter which mind it comes from, if they have a great solution, let's use that mind. Let's not get too concerned with, "You don't have the perfect credentials to solve the problem."

**KIRBY:** You mentioned that you were going around to some of the stores and, you know, popping in the gun store, and that the ammo was gone missing, had been all bought up. What is your sense of the temperature of the people in the community? How are they enduring this and what are they thinking?

**ERICKSON:** Well, they're generally frustrated. I think people are hurting right now, I think that's a pretty common feeling in Kern County and different areas I've driven to, is people are afraid, they're in lockdown, they're not working. I mean, there's a, there's a sense of frustration. I think frustration, I mean, because our video got millions of hits and a lot of the people are like "Finally, someone is pushing for a solution to get us back to work and help to decrease the collateral damage." So, I would say, from my readings, frustration is the number one thing I'm hearing from Americans who are not allowed to carry on with their life right now.

**KIRBY:** Do you think that the people in your community would submit to a mandatory vaccination regime or COVID vaccine?

**ERICKSON:** I don't think so. I think it's appropriate to give people the option for a vaccine, like flu. You know, when you start telling people, "You have to do something, you have no choice," it helps the herd immunity. The vaccination increases our peak towards herd immunity. It will happen regardless, but it is helpful. There's no question about that. So, I don't think we should force people to have a vaccine.

**KIRBY:** Okay. Now, final words from you guys. Just anything you want to address.

**MASSIHI:** I think we just, this is a time where we should all listen to each other, learn from each other, and come up with solutions to move California forward and move the country forward. And

that was our goal when we gave the press conference, is to, kind of, chat with our community. We didn't think it was going to go viral and global, but we just wanted to share our data and, you know, show folks that this is what we've found, and what we would appreciate is constructive criticism, and a solution. A solution to open America back up again.